UNDERGROUND STORAGE TANK REMOVAL AT WALKER-TURNER PROPERTY BLOOMFIELD AVENUE AND LAKELAND ROAD SANTA FE SPRINGS, CALIFORNIA

Los Angeles County
Department of Public Works
File Number I-6657-1H
Closure Permit Number 6680 B

Submitted to:

Turner Development Corporation
Newport Beach, California

TRC Project Number 7014-N23-00

April 6, 1990

TRC
Environmental Consultants, Inc.

23361 Madero Street
Suite 100
Mission Viejo, CA 92691-2730

(714) 581-6860

A TRC Company

Factual information regarding operations, and test data has been obtained in part from company personnel, the facility audited, and its employees or agents and has been assumed by us to be correct and complete. Since the statements in this report are subject to professional interpretation, they could result in differing conclusions. In addition, the findings and conclusions contained in this report are based on various quantitative and qualitative factors as they existed on the date of this report. Therefore, there can be no assurance that intervening factors will not arise which will affect the conclusions reached by TRC. This information is submitted solely for the internal use of Turner Development Corporation.

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TRC
Environmental
Consultants, Inc.

23361 Madero Street, Suite 100, Mission Viejo, CA 92691-2730 (714) 581-6860

April 6, 1990

Ms. Susan Drummy
Turner Development Corporation
1200 Quail Street, Suite 160
Newport Beach, CA 92660

RE: Underground Storage Tank Removal and Soils Investigation at Walker-Turner Property
Bloomfield Avenue and Lakeland Road, Santa Fe Springs, California
TRC Project Number 7014-N23-00

Dear Susan:

TRC Environmental Consultants, Inc. is pleased to present this report on the above referenced study for your review. If you have any questions or require further clarification, please contact us.

Sincerely,

TRC ENVIRONMENTAL CONSULTANTS, INC.

George D. Glazer
Project Hydrogeologist

Patricia D. Royalty
Principal Consulting Hydrogeologist

Anthony F. Severini, R.G.
Vice President and Manager
Hazardous Waste Services

CC: Rusty Turner, Turner Development Corporation

REGISTERED GEOLOGIST
ANTHONY F. SEVERINI
NO. 3852
STATE OF CALIFORNIA

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1.0 INTRODUCTION

On January 23, 1990, Turner Development Corporation retained TRC Environmental Consultants, Inc. (TRC) to observe the removal of four underground storage tanks (USTs) at the Walker-Turner property located at the southeastern corner of Bloomfield Avenue and Lakeland Road, Santa Fe Springs, California (Figures 1 and 2). This report has been prepared to satisfy the permanent closure requirements for USTs previously storing hazardous materials on the property as defined in the permit issued by the Los Angeles County Department of Public Works, Waste Management Division. In addition, this report summarizes the results of the removal of a UST from the subject property performed by L. Blain Company and observed by Dames & Moore in 1986.

The subject property is currently owned by Mr. George Walker and is in an escrow account for sale to Turner Development Corporation. The site is currently listed on the "California Department of Health Services Expenditure Plan for the Hazardous Waste Cleanup Bond Act of 1984" (CDHS Expenditure Plan). The CDHS Expenditure Plan identifies the site as being on the State Superfund Site Backlog. TRC is conducting an ongoing environmental assessment of the subject property and preparing a Preliminary Endangerment Assessment (PEA) report for the California Department of Health Services (CDHS) who will be providing clean-up oversight. It is anticipated that this PEA will be followed by a Remedial Action Plan (RAP) for the site.

Previous site investigations revealed that four USTs were present on the subject property. These included one 3,000-gallon, one 4,000-gallon, one 6,000-gallon, and one 10,000-gallon storage tanks. All four tanks had been taken out of service in the past. The locations of these tanks on the subject property are shown on Figure 3.

During a geophysical survey of the subject property, it was determined that the 10,000-gallon tank was completely full of an apparent mixture of water and gasoline fuel. The 3,000-gallon tank appeared to contain a small amount of degraded fuel product. The remaining two tanks were empty.

The excavation and removal of the tanks was performed by Mayfield Enterprises, Inc. under direct contract with Turner Development Corporation. TRC observed the tank removals and collected soil samples from beneath the tanks on February 1, 1990. The soil sampling was performed

by Project Hydrogeologist George Dean Glazer. Principal Consulting Hydrogeologist Patricia D. Royalty provided report review and overall management of this project. Final approval of the work and this report was provided by Anthony F. Severini, R.G., Vice President and Manager of Hazardous Waste Services. The following is a summary of our findings.

0 4

Statute Miles

USGS 1:250,000 SCALE
NAME TOPOGRAPHIC MAP

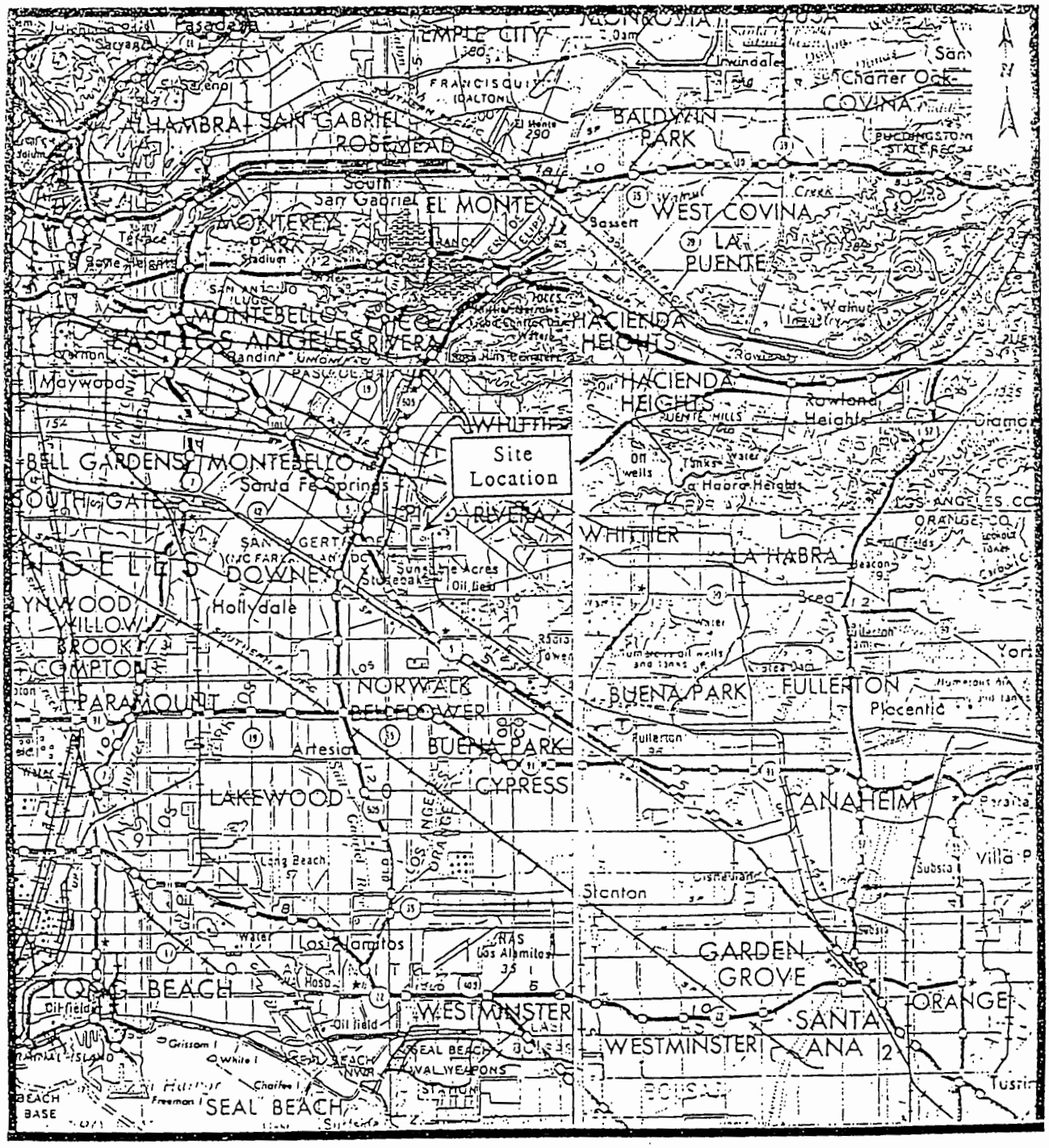
REGIONAL SITE LOCATION

WALKER-TURNER PROPERTY
SANTA FE SPRINGS, CALIFORNIA

7014-N23

FIGURE 1

TRC



0 1/2

Statute Miles

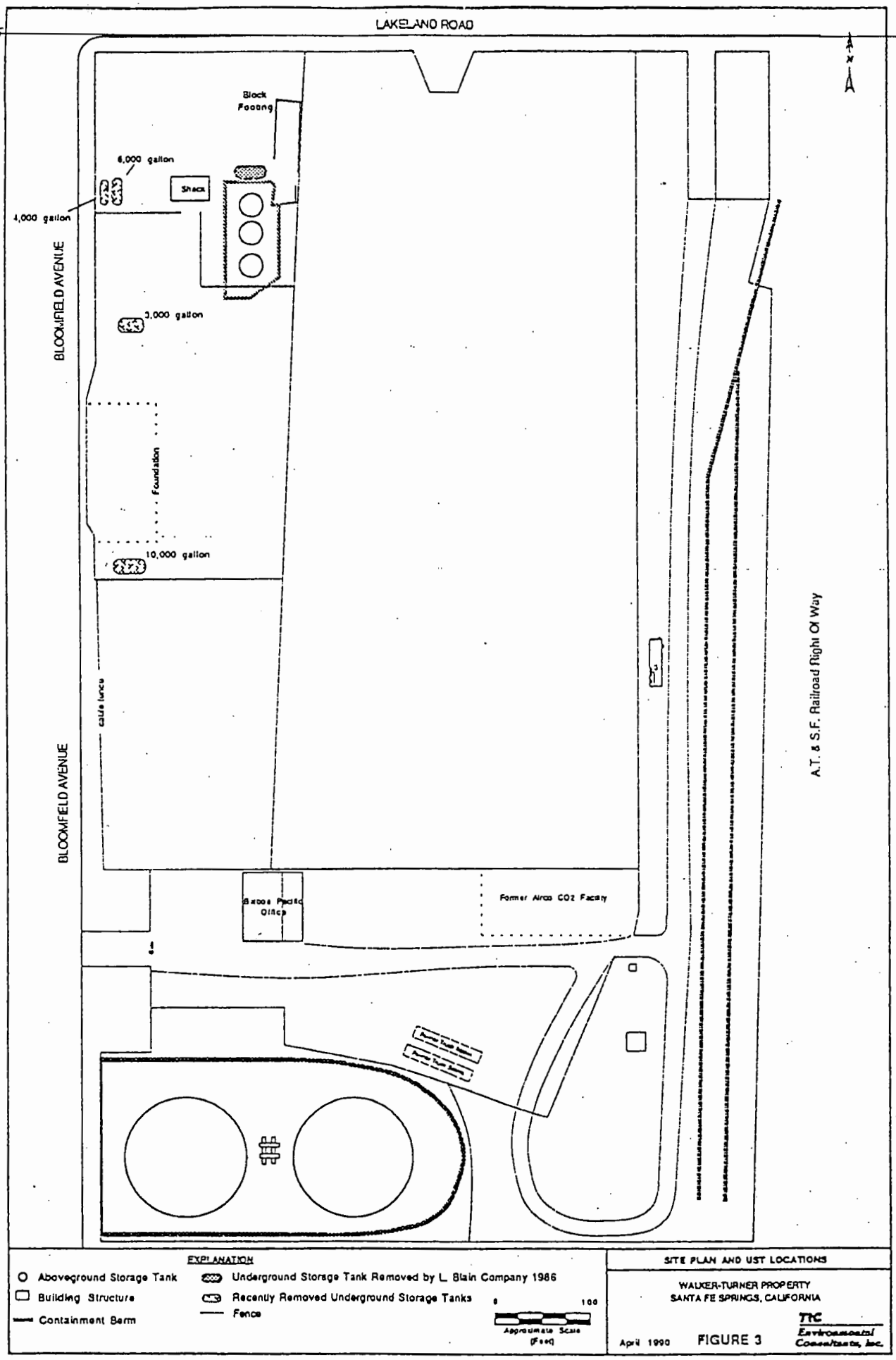
USGS 1:24,000 SCALE
NAME QUADRANGLE TOPOGRAPHIC MAP

SITE LOCATION

WALKER-TURNER PROPERTY
SANTA FE SPRINGS, CALIFORNIA

7014-N23 FIGURE 2

TRC


LAKELAND ROAD
Block Footing
6,000 gallon
Shack
4,000 gallon
3,000 gallon
BLOOMFIELD AVENUE
Foundation
10,000 gallon
BLOOMFIELD AVENUE
A.T. & S.F. Railroad Right Of Way
Former Airco CO2 Facility
EXPLANATION
Aboveground Storage Tank
Building Structure
Containment Berm
Underground Storage Tank Removed by L. Blain Company 1986
Recently Removed Underground Storage Tanks
Fence
0
100
Approximate Scale (Feet)
SITE PLAN AND UST LOCATIONS
WALKER-TURNER PROPERTY
SANTA FE SPRINGS, CALIFORNIA
April 1990
FIGURE 3
TRC Environmental Consultants, Inc.

TRC

2.0 HISTORICAL INVESTIGATIONS

Prior to TRC's involvement in the investigations on the subject property, a UST was removed from the subject property by L. Blain Company a soils investigation was performed by Dames & Moore. A portion of the report relevant to the UST removal prepared by Dames & Moore is included in Appendix A. The report indicates that the tank was apparently structurally sound at the time of removal. Evidence of leakage was noted in the immediate vicinity of the fillport connections on top of the tank. Four soil samples were taken from the excavation and analyzed for California Administrative Manual (CAM) metals and polychlorinated biphenyls (PCBs) by a California certified laboratory. Results indicated the presence of elevated levels of several metals as well as the presence of PCBs (Appendix A).

In October 1989, TRC conducted a soils investigation which included several soil borings in the vicinity of the previously removed UST. The presence of PCBs was found to extend beyond the area of this UST (Figure 4).

In November 1989, TRC performed additional investigations on the subject property. These investigations included soil borings adjacent to the known USTs. Additionally, a geophysical survey of the subject property was performed resulting in several areas of magnetic anomalies. These anomalies were explored by trenching with a backhoe. One of these anomalies was a previously unknown 3,000-gallon UST.

Three soil borings were drilled adjacent to the 4,000-gallon and 6,000-gallon UST group on the northwestern corner of the subject property (Figure 4). These borings are identified as TSB-1, TSB-2, and W-1 (TSB-3). The borings were drilled to depths between 20 to 129 feet with a CME-55 drilling rig using a 6-inch hollow-stem auger. Soil samples were collected at 5 foot intervals by driving a modified California split-spoon sampler equipped with clean brass rings ahead of the auger bit. One sample ring was sealed, capped, labeled, double bagged in plastic bags, and placed on ice for transportation to Del Mar Analytical, a California certified laboratory in Irvine, California. Samples were extracted from a second ring and placed in plastic bags for field screening with a HNu photoionization device (PID) for determination of which samples would be analyzed by the laboratory.

Field readings on samples from TSB-1 and TSB-2 did not indicated the presence of detectable hydrocarbon contamination. Field readings from W-1 (TSB-3) indicated possible contamination at a depth of 20 to 40 feet. The 20 foot sample was analyzed for total petroleum hydrocarbons (TPH) using EPA method 418.1. No levels of TPH were found above the detection limit. The 35 foot sample was analyzed for TPH in the diesel fuel range using EPA method 8015 (modified). No levels of TPH were found above the detection limit.

Groundwater was encountered at a depth of 121 feet below ground level during the drilling of TSB-3. Soil boring TSB-3 was completed as a groundwater monitoring well (W-1). Depth to groundwater was subsequently measured to be 105 feet below ground surface.

Two soil borings were drilled adjacent to the 10,000-gallon UST (Figure 4). These borings are identified as TMB-3 at the west end of the tank and TSB-6 at the east end of the tank. Both borings were drilled to a depth of 30 feet using the above describe procedures.

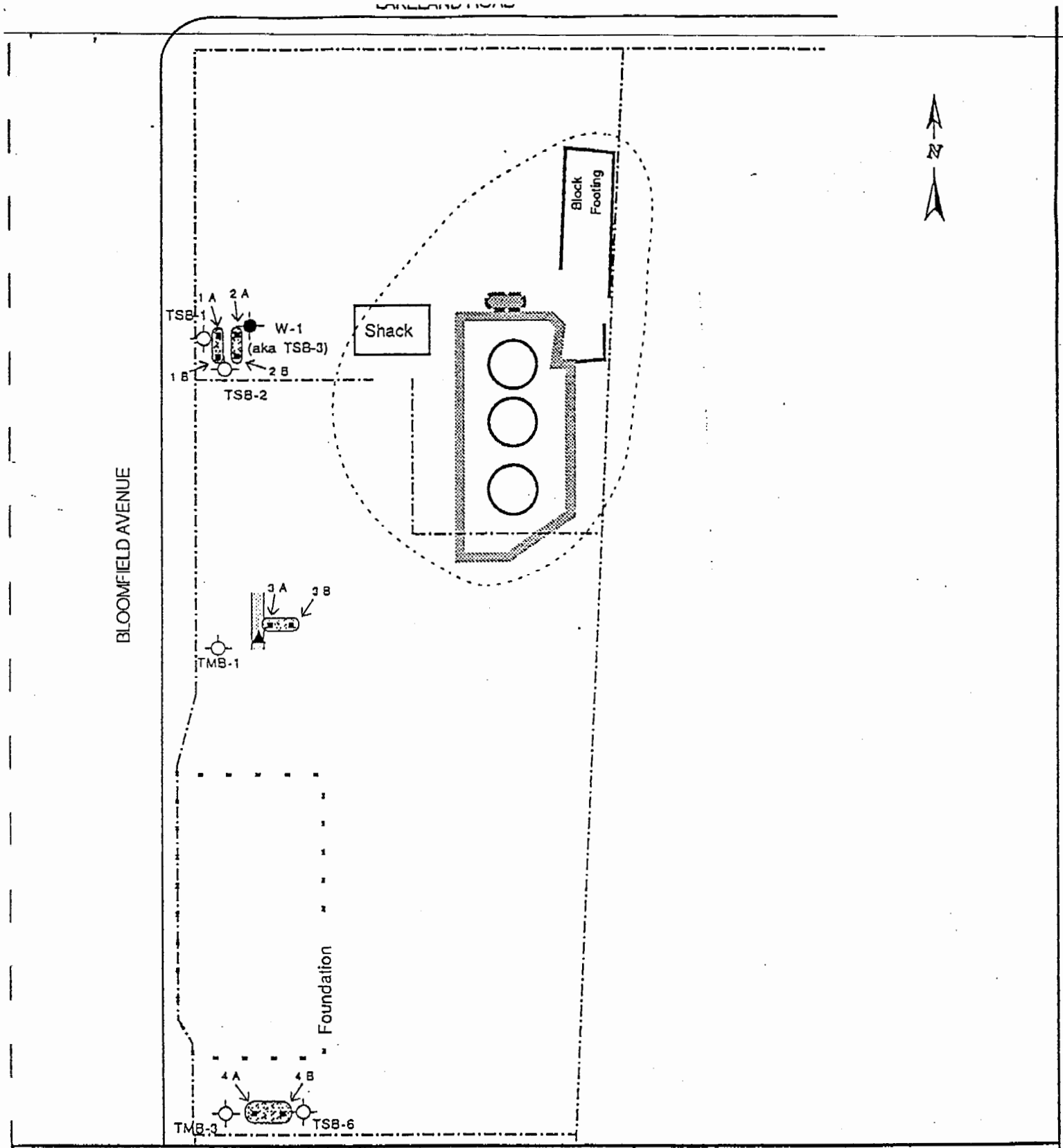
Field readings on samples from TMB-3 and TSB-6 indicated potential hydrocarbon contamination. Samples from TMB-3 at depths of 10 and 30 feet were analyzed for TPH in the gasoline range using EPA method 8015 (modified). The 10 foot sample was found to contain 2,200 mg/Kg of TPH and the 30 foot sample had 3.3 mg/Kg of TPH. Samples from TSB-6 at depths of 10 and 30 feet were analyzed for TPH in the gasoline range with benzene, toluene, ethylbenzene and xylene (BTEX) distinction using EPA methods 8015 (modified) and 8020. The 10 foot sample was found to have 0.14 mg/Kg of benzene, 4.4 mg/Kg toluene, 22 mg/Kg ethylbenzene, 120 mg/Kg xylenes, and 1,800 mg/Kg TPH. The 30 foot sample did not contain any of the constituents tested for above the detection limits.

Soil samples collected during the trenching operations were placed in clean glass sample jars, sealed, labeled, double bagged in plastic bags, and placed on ice for transportation to the laboratory. The sample collected at the western end of the exposed 3,000-gallon UST (Figure 4) at a depth of 7 feet below ground surface was analyzed for TPH with BTEX distinction using EPA methods 8015 (modified) and 8020. This sample was found to have 0.08 mg/Kg ethylbenzene and 0.10 mg/kg xylenes. No levels of benzene, toluene, or TPH were found above the detection limits.

A soil boring was drilled at the western end of the 3,000-gallon UST to a depth of 30 feet using the previously described procedures. This boring is identified as TMB-1 on Figure 4. Field readings with the PID did not indicate the presence of any detectable hydrocarbon contamination in the samples. The sample from a depth of 20 feet was analyzed for TPH in the diesel fuel and gasoline ranges using EPA method 8015 (modified). No levels of TPH were found above the detection limits.

All soil samples collected during these investigation were transported to Del Mar Analytical using standard chain-of-custody procedures. Copies of the chain-of-custody, laboratory analyses, and borehole logs for the above described investigations are included in Appendix B.

In summary, hydrocarbon contaminated soil was identified in the area of the 10,000-gallon UST to an approximate depth of 30 feet. A small amount of localized hydrocarbon soil contamination was also found around the western end of the 3,000-gallon UST. No hydrocarbon soil contamination was observed around the 4,000-gallon and 6,000-gallon USTs.



EXPLANATION

- Aboveground Storage Tank
- Trench Sample
- Grab Sample
- Borehole Location
- Recently Removed UST
- UST Removed by L. Blain Company 1986
- Fence
- Containment Berm

0 100

Approximate Scale (Feet)

BOREHOLE AND SAMPLING LOCATIONS

WALKER-TURNER PROPERTY
SANTA FE SPRINGS, CALIFORNIA

TRC Environmental Consultants, Inc.

7014-N23 FIGURE 4

TRC

2.0 TANK EXCAVATION, REMOVAL, AND SOIL SAMPLING

On January 31, 1990, Mayfield Enterprises, Inc. began removal of the top soil from the four tanks and uncovered associated plumbing connected to the tanks. Mayfield Enterprises obtained permits to excavate and remove the tanks from the Los Angeles County Department of Public Works, Waste Management Division and the City of Santa Fe Springs Fire Department. The tank removals were performed in accordance with existing regulations of the State of California, City of Santa Fe Springs, and National Fire Prevention Code. Copies of all permits obtained by Mayfield Enterprises for the tank removals are included in Appendix C.

On February 1, 1990, TRC personnel were present on site for the removal of the USTs. Top soil had been stockpiled next to the excavations. Soils removed from the excavation around the 10,000-gallon UST had been covered with plastic sheeting. Approximately 1,400 gallons of liquid had been pumped from the 10,000-gallon UST into a tank truck for transportation by Crosby & Overton to Gibson Oil and Refining Company in Bakersfield, California. The remaining liquids (approximately 8,500 gallons) were pumped into tank trucks and transported by Crosby & Overton to De Menno Kerdoon in Compton, California for recycling. G. V. Adams Inc. Environmental Services of Torrance California triple rinsed each tank with water. The rinseate was pumped into tank trucks and transported by Crosby & Overton to De Menno Kerdoon for recycling. Copies of manifests for these liquids are included in Appendix D. The original manifests were forwarded by TRC to the California Department of Health Services on behalf of the property owner. A copy of this transmittal letter is also included in Appendix D. After the liquids had been removed from the tanks, dry ice was placed inside each tank. According to Mr. Jim Mayfield of Mayfield Enterprises, approximately 15 pounds of dry ice per 1,000-gallon capacity had been added to each tank. This application of dry ice was repeated two more times.

The tanks were removed from the site by J. D. Brodine & Son Inc. using a crane to lift them onto flatbed trucks. The four tanks were all of steel construction and were found to be in good condition upon removal. No obvious holes or leaks were noted in the tanks. The tanks were transported by J. D. Brodine & Son, Inc. to their facility in Fontana, California where they were cut up for scrap. A copy of the certification of tank disposal is included in Appendix D.

Present during the removal were Inspector Fred Nikitin of the City of Santa Fe Springs Fire Department, Mr. Jim Mayfield of Mayfield Enterprises, and TRC personnel. Mr. Nikitin inspected the tanks and approved that they were vapor free in accordance with City of Santa Fe Springs Fire Department requirements. The tanks were inspected for explosive atmosphere using a Bacnact TLV catalytic vapor analyzer.

After the tanks were removed from the excavations, soil samples were collected from beneath the tanks at depths of approximately 1 to 2 feet. The locations of the eight samples are shown on Figure 4. Soil samples 1A, 1B, 2A, and 2B were retrieved from the base of a clam-shell bucket. Soil samples 3A, 3B, 4A, and 4B were retrieved from the bucket of a backhoe. The samples were placed in clean glass jars, capped, sealed, labeled, double bagged in plastic bags, and placed on ice for transportation to the laboratory for analysis. The soils from beneath the tanks in the buckets were also monitored using an OVM PID during and after the tank removals. PID readings of 20 to 25 parts per million (ppm) were recorded on soil retrieved from location 4B. No PID readings were observed at the remaining sampling locations.

The samples collected from beneath the four tanks were transported to Del Mar Analytical using standard chain-of-custody procedures. The samples were analyzed for TPH in the diesel fuel and gasoline ranges with BTEX distinction using EPA methods 8015 (modified) and 8020. Only sample 4B below the 10,000-gallon UST had levels of contaminants tested for above the detection limits. This sample was found to have 0.38 mg/Kg benzene, 0.55 mg/Kg toluene, 0.77 mg/Kg ethylbenzene, 3.2 mg/Kg xylenes, and 24 mg/Kg TPH. Laboratory results and accompanying chain-of-custody documentation are included in Appendix E.

Visual observations of the excavations revealed staining below the 10,000-gallon UST (Tank 4). No obvious staining was observed in the remaining excavations. The stockpiles of excavated soils were used to back-fill the open excavations.

3.0 SUMMARY AND CONCLUSIONS

TRC observed the removal of four USTs and performed a soils investigation on the Walker-Turner property located at the southeastern corner of Bloomfield Avenue and Lakeland Road in Santa Fe Springs, California on February 1, 1990. The excavated tanks appeared to be in good condition. Contaminated soils were identified around the 10,000-gallon UST in past investigations and confirmed by soil samples recovered from beneath the tank. No other areas of contamination were observed during this investigation.

TRC is presently providing environmental consulting services to Turner Development Corporation on the subject property. The work performed is overseen by the California Department of Health Services (CDHS). Current plans are for the contaminated soils on the subject property which include those around the 10,000-gallon UST to be excavated and bioremediated on-site under the oversight of the CDHS. The PCB contaminated soils will be excavated and hauled to an approved disposal facility. TRC requests that the Los Angeles Department of Public Works grant closure of all the USTs with the understanding that the CDHS will oversee the excavation and/or remediation of contaminated soils.

APPENDIX A

Dames & Moore Report

TRC

Dames & Moore
812 Anacapa Street, Suite A
Santa Barbara, CA 93101
(805) 963-9676 / 963-5976

October 16, 1986

Redevelopment Agency
City of Santa Fe Springs
11710 Telegraph Road
Santa Fe Springs, California 90670

Attention: Richard H. Weaver
Director, Redevelopment Agency

Report
Site Assessment Recommendations
Walker Properties Site
Santa Fe Springs, California

INTRODUCTION

Presented in this report are our recommendations regarding the scope of additional site assessment studies to be conducted at the Walker Properties site at 11020 Bloomfield Road, Santa Fe Springs, California. This report includes the results of our observations of the removal of an underground tank by L. Blain Co. and a soil sampling program conducted in the excavation following tank removal. The general site area is shown on Figure 1. Dames & Moore has previously conducted several projects at the subject site (see our Subsurface Investigation Report, dated July 1, 1985, and our Draft Action Plan, dated November 27, 1985.

The removal of the underground tank by L. Blain Company was observed by Dames & Moore to ensure compliance with Dames & Moore's Draft Action Plan, L. Blain's written plan of action and applicable environmental regulations. The

soil samples were collected to evaluate whether soil contamination exists in the floor and walls of the excavation from which the underground tank was removed. A detail of the underground tank excavation showing the soil sample locations is presented in Figure 2. Other areas of concern on the Walker Properties site discussed in this report include the two large above-ground tanks in the southern portion of the site and the small above-ground tanks present in the vicinity of the underground tank area (Figures 1 and 2).

PURPOSE AND SCOPE

The purpose of the current investigation is to: (1) ensure that the tank removal procedure was conducted according to our Draft Action Plan, L. Blain Company's plan of action and in compliance with applicable environmental regulations; (2) collect soil samples from the floor and walls of the existing excavation to determine whether potentially hazardous compounds, heavy metals and polychlorinated biphenyls (PCBs) are present in the soils surrounding the existing excavation; and, (3) provide additional site assessment recommendations for the two large above ground tanks area and the small above ground tanks areas as well as the underground tank excavation. The scope of the investigative activities completed to date includes observation of the tank removal, collection of four soil samples, analysis of the samples for California Administrative Manual (CAM) metals (using EPA approved ICAP method) and PCBs (using EPA method 8080), interpretation of the analytical results, and formulating recommendations for additional site investigations and remediation. The results and conclusions of our completed studies are discussed below followed by our recommendations for further sampling, analysis and remediation.

INVESTIGATIVE METHODS

Underground Tank Removal

On September 18, 1986, a Dames & Moore geologist was onsite at the Walker Properties site and observed the underground tank removal procedure. Representatives of the City of Santa Fe Springs Fire Department and the Los Angeles County Department of Public Works were also present. The soils overlying and adjacent to the sides of the tank had previously been removed by L. Blain

if any, from the sample 3 area. The samples were collected with pre-cleaned stainless steel scoops and placed in pre-cleaned wide mouth glass jars equipped with Teflon-lined lids. After closure, the sample jars were sealed with chain of custody seals and electrical tape. Labels attached to each sample jar included the following information: (1) sample number; (2) date and time of collection; (3) collector's name; (4) owner; and (5) location. The samples containers were stored in an ice chest cooled with blue ice pending delivery to the analytical laboratory. Completed chain of custody forms accompanied the samples which were hand delivered to the analytical laboratory.

Analytical Testing Program

The soil samples were analyzed by International Technology Corporation Analytical Services Laboratory in Cerritos, California (IT). The samples were analyzed for CAM metals using an EPA-approved ICAP methodology, and for PCBs using EPA Method 8080 which includes gas chromatography with electron capture detection (GC-ECD). Quality control was maintained throughout laboratory analytical procedures. The results of this analysis are summarized in Table 1 and presented in Appendix A. The IT laboratory is State of California Department of Health Services-approved and EPA-accredited to perform these procedures.

RESULTS AND CONCLUSIONS

Investigative Results

The results of the laboratory analyses of the soil samples (Table 1 and Appendix A) indicate that the surface soils in the existing excavation contain elevated levels of PCBs and some metals. The California Administrative Code Title 22, Division 4, Chapter 30, Article 11, Section 66699 has established concentration limits for particular compounds/substances above which the substances being tested are considered to be hazardous.

The California Department of Health Services considers any waste which contains a compound listed in Table 1 to be a hazardous waste if: (1) the total concentration of a particular compound exceeds the Total Threshold Limit Concentration (TTLC) for that compound; or, (2) the extractable concentration

(in mg/l), as determined by a Waste Extraction Test (WET), of any listed compound exceeds the respective Soluble Threshold Limit Concentration (STLC) for that compound. It should be noted that the samples were analyzed only for total concentrations; WET tests were not performed.

Total concentrations in Samples 2 and 3 exceed the TTLC for PCB's (50 mg/kg or ppm) and sample 1 exceeds the STLC for PCB (5mg/l or ppm). Total concentration in Sample 3 also exceeds the TTLC for lead (1,000 mg/kg). Total concentrations in all four samples exceed the STLC, but are less than the TTLC, for barium (100 mg/l), cadmium (1.0 mg/l) and vanadium (24 mg/l). Total concentrations in samples 1, 2 and 4 exceed the STLC, but are less than the TTLC, for copper (25 mg/l) and lead (5.0 mg/l). Total concentration in sample 4 exceeds the STLC, but is less than the TTLC for nickel (20 mg/l) and sample 3 exceeds the STLC, but is less than the TTLC for zinc (250 mg/l).

CONCLUSIONS

It is our conclusion that at least some of the soils in the side walls and bottom of the excavation are hazardous because of their PCB and lead concentrtions. Hazardous concentrations of barium, cadmium, vanadium, copper, nickel and zinc may exist and could be determined by performing WET tests on the samples.

Our evaluation of the analytical results suggest that a positive correlation exists between stained soils and elevated contaminant concentrations. We believe that stained soils will exhibit detectable contaminant concentrations when analyzed, while clean appearing soils will contain no detectable contaminants. Our recommendations for further assessment, discussed below, are based on this correlation.

RECOMMENDATIONS

Underground Tank Excavation

Our recommendation is to evaluate the vertical and lateral extent of contamination in the vicinity of the underground tank excavation for the purpose of developing costs for site remediation by excavation and removal of con-

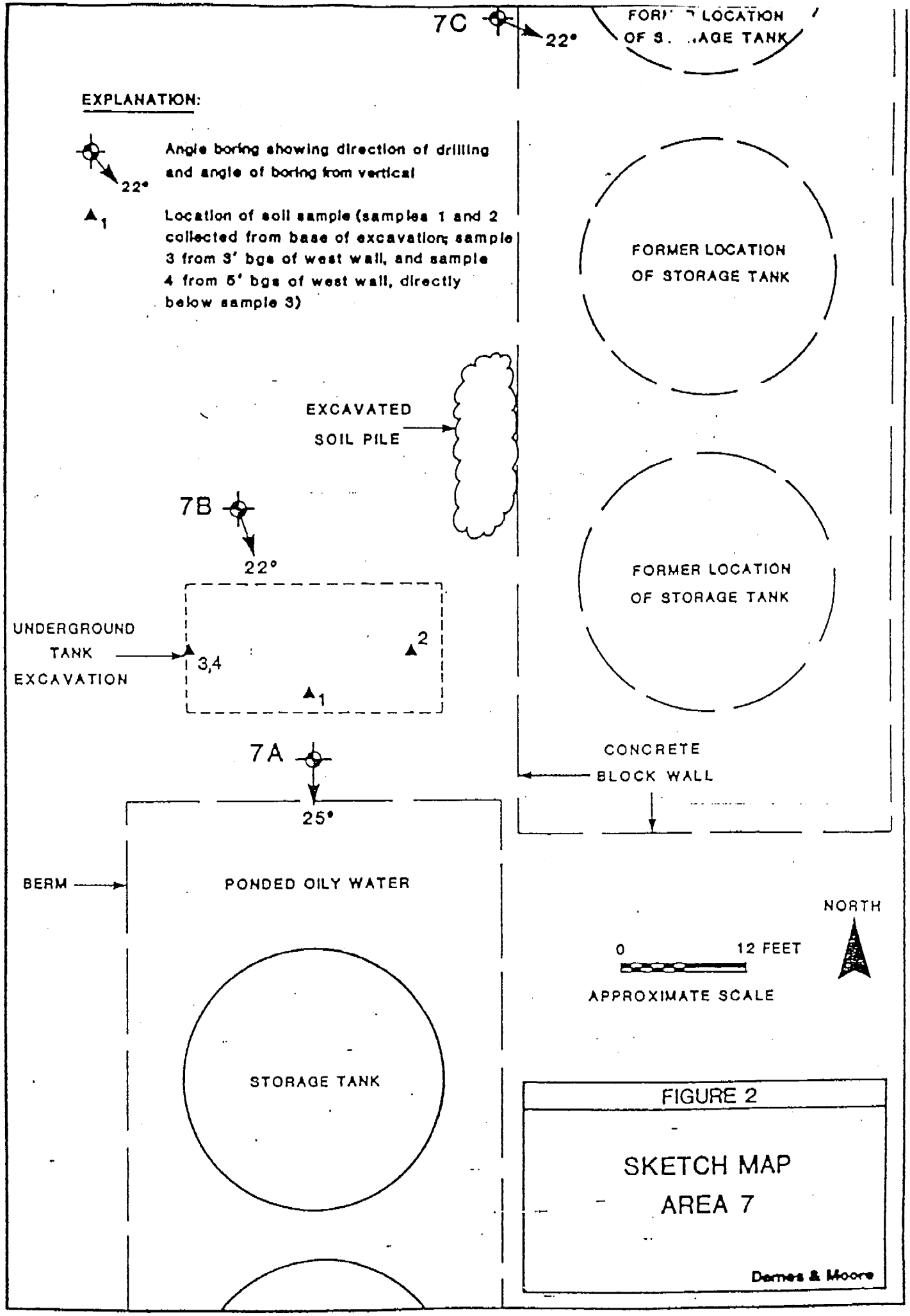

7C
22°
FORMER LOCATION OF STORAGE TANK
EXPLANATION:
Angle boring showing direction of drilling and angle of boring from vertical
22°
▲1
Location of soil sample (samples 1 and 2 collected from base of excavation; sample 3 from 3' bgs of west wall, and sample 4 from 5' bgs of west wall, directly below sample 3)
FORMER LOCATION OF STORAGE TANK
EXCAVATED SOIL PILE
7B
22°
FORMER LOCATION OF STORAGE TANK
UNDERGROUND TANK EXCAVATION
3,4
2
1
7A
25°
CONCRETE BLOCK WALL
BERM
PONDED OILY WATER
NORTH
0
12 FEET
APPROXIMATE SCALE
STORAGE TANK
FIGURE 2
SKETCH MAP
AREA 7
Dames & Moore

TABLE 1
SOIL SAMPLES ANALYTICAL RESULTS SUMMARY(1)

CONSTITUENT	SAMPLE AND CONCENTRATION(2)			
	1	2	3	4
PCB-1242	-	58	248	1
PCB-1248	29	-	-	-
Antimony	TR <2(3)	TR <2	TR <2	TR <2
Arsenic	2.63	4.39	1.42	2.50
Barium	190	150	260	190
Beryllium	0.5	0.4	TR <0.3	0.7
Cadmium	3.1	2.1	1.7	3.1
Chromium (total)	26	23	16	30
Cobalt	14	12	6.0	16
Copper	32	38	16	27
Lead	130	54	1100	74
Mercury	0.17	TR <0.1	0.13	0.12
Molybdenum	1.2	1.0	0.7	0.9
Nickel	18	16	10	20
Silver	1.3	1.5	ND <0.3(4)	ND <0.3
Vanadium	63	55	32	74
Zinc	120	100	490	74

(1) Only those constituents detected in at least one of the samples are shown herein (selenium and thallium were not detected in any of the samples).

(2) PCB concentrations are in parts per million (ppm); and metals concentrations are in milligrams per kilogram (mg/kg) which is equivalent to ppm.

(3) The trace less than (TR<) symbol means "trace detected but not at or above the indicated value (detection limit)".

(4) The not detected less than (ND<) symbol means "not present at or above the indicated value (detection limit)".

Table I

	Milligrams/kilogram			
	13262-013-42-1	13262-013-42-2	13262-013-42-3	13262-013-42-4
Antimony	TR<2	TR<2	TR<2	TR<2
Arsenic	2.63	4.39	1.42	2.50
Barium	190	150	260	190
Beryllium	0.5	0.4	TR<0.3	0.7
Cadmium	3.1	2.1	1.7	3.1
Chromium	26	23	16	30
Cobalt	14	12	6.0	16
Copper	32	38	16	27
Lead	130	54	1100	74
Mercury	0.17	TR<0.1	0.13	0.12
Molybdenum	1.2	1.0	0.7	0.9
Nickel	18	16	10	20
Selenium	ND<0.3	ND<0.3	ND<0.3	ND<0.3
Silver	1.3	1.5	ND<0.3	ND<0.3
Thallium	ND<5	ND<5	ND<5	ND<5
Vanadium	63	55	32	74
Zinc	120	100	490	74

Table II

Sample Identification	Total PCB Micrograms/gram	PCB-1242	PCB-1248
	Parts Per million		
13262-013-42-1	29	----	29
13262-013-42-2	58	58	----
13262-013-42-3	248	248	----
13262-013-42-4	1	1	----

ND - This compound was not detected; the limit of detection for this analysis is less than the amount stated in the table above.

TR - Trace, this compound was present, but was below the level at which concentration could be determined.

APPENDIX B

Historical

Borehole Logs, Laboratory Analyses
and
Chain-of-Custody Documentation

TRC

TRC

Environmental Consultants, Inc.

BOREHOLE LOG

Project Name: Turner, Santa Fe Springs			
Project No. 6700-P23-03	Borehole No. TSB-2		Sheet 1 of
Borehole Location Parcel 3, South of tanks		Elevation and Datum:	
Drilling Co. West Hazmat	Driller:	Date Started 10-31-89	Date Finished 10-31-89
Drilling Equipment: CME-55	Helper:	Total Depth (feet) 20	Depth to Bedrock (feet) N/A
Drilling Method: 4 inch Hollow Stem Auger		Borehole Diameter: 4 inches	
Drilling Fluid: N/A		Depth to Water Initial: N/A	Comp. N/A
Completion Information: Backfill w/ native		Logged by: SAA	Checked by:

Depth (feet)	Description	Lithology	Headspace (ppm)	Samples: Number	Samples: Blow Count	Remarks
	0'-3', Reddish brown silt w/fine sand (80/20), crubbly, dry, odorless					
5	Reddish brown compact silt, minor fine sand, dry, odorless			5		Becoming less red ↓
10	Medium brown silt and fine sand (70/30), compact, dry, well sorted, no odor		0	10		
15	Medium brown fine sand, well sorted, dry, odorless			15		
20	Brownish grey fine sand, well sorted, dry, odorless		0	20		
						Total depth 20', dry
25						
30						
35						
40						

TRC

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Environmental
Consultants, Inc.

BOREHOLE LOG

Project Name: Turner, Santa Fe Springs

Project No. 6700-P23-03 | Borehole No. Well W-1 (Soil Boring TSB-3) | Sheet 2 of 2

Depth (feet)	Description	Lithology	Headspace (ppm)	Samples: Number	Samples: Blow Count	Remarks
50	Light Brown Fine-Medium Sand (50/50), Poorly Sorted, Angular, Moist		6	50		
60	Grey Fine Sand w/Silt (80/20), Moist, Faint Odor		6	60		
70	Greenish Grey Silt w/Clay (60/40), Ductile, Moist		5	70		
80	Grey Silt, Moist		4	80		
85	Grey Sand (Fine-Coarse), (30/30/30/), Well Sorted, Angular, Strong odor, (End Drilling 10-31-89)		5	85		
90	(Begin Drilling 11-1-89) Grey Sand Fine-Medium, Well Sorted, Minor Pebbles, Moist					
100	Grey Sand Fine-Medium, Well Sorted, Minor Pebbles, Moist, No Samples between 100'-130'					
110						
120						▼ 121 feet, Water
130						Total depth 129'

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Environmental Consultants, Inc.

BOREHOLE LOG

Project Name: Turner, Santa Fe Springs			
Project No. 6700-P23-03	Borehole No. TSB-6		Sheet 1 of
Borehole Location North of 10K tank		Elevation and Datum:	
Drilling Co. West Hazmat	Driller:	Date Started 10-31-89	Date Finished 10-31-89
Drilling Equipment: CME-55	Helper:	Total Depth (feet) 30	Depth to Bedrock (feet) N/A
Drilling Method: 4 inch Hollow Stem Auger		Borehole Diameter: 4 inches	
Drilling Fluid: N/A		Depth to Water Initial: N/A	Comp. N/A
Completion Information: Backfill w/ native		Logged by: SAA	Checked by:

Depth (feet)	Description	Lithology	Headspace (ppm)	Samples: Number	Samples: Blow Count	Remarks
5	Red/brown hard pan clay, dense, dry, odorless		0	5		
10	Red/brown silty fine sand (50/50), dry, well sorted strong odor		150	10		
15	Light brown fine-medium sand (50/50), dry, angula strong odor		100	15		
20	Brown silty fine sand (50/50), dry, beach like, slight odor		10	20		
25	Red/brown fine-medium sand (80/20), dry, angular slight odor		5	25		
30	Light brown fine sand, angular, dry, slight odor		1.8	30		
35						Total depth 30', dry
40						

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Environmental Consultants, Inc.

BOREHOLE LOG

Project Name: Turner, Santa Fe Springs			
Project No. 6700-P23-03	Borehole No. TMB-1		Sheet 1 of 9
Borehole Location West of Northern UST		Elevation and Datum:	
Drilling Co. West Hazmat	Driller: Dave	Date Started 11-6-89	Date Finished 11-6-89
Drilling Equipment: CME-55	Helper: Craig	Total Depth (feet) 30	Depth to Bedrock (feet) N/A
Drilling Method: 8 inch Hollow Stem Auger		Borehole Diameter: 8 inches	
Drilling Fluid: N/A		Depth to Water	Initial: N/A Comp. N/A
Completion Information: Backfill with native		Logged by: MIJ	Checked by:

Depth (feet)	Description	Lithology	Headspace (ppm)	Samples: Number	Samples: Blow Count	Remarks
						Background Headspace .6 ppm
5	Dark Brown Silt		< .6	5		
10	Light Brown Sandy Silt		< .6	10		
15	Light Brown Silty Fine Sand		< .6	15		
20	Light Brown Silty Fine Sand (poor return, no bag sample)			20		
25	Light Brown Silty Fine-Medium Sand		< .6	25		
30	Light Brown Silty Fine-Medium Sand		< .6	30		Total Depth 30', Dry

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Environmental Consultants, Inc.

BOREHOLE LOG

Project Name: Turner, Santa Fe Springs			
Project No. 6700-P23-03	Borehole No. TMB-3		Sheet 3 of 9
Borehole Location By Southern UST		Elevation and Datum:	
Drilling Co. West Hazmat	Driller: Dave	Date Started 11-6-89	Date Finished 11-6-89
Drilling Equipment: CME-55	Helper: Craig	Total Depth (feet) 30	Depth to Bedrock (feet) N/A
Drilling Method: 8 inch Hollow Stem Auger		Borehole Diameter: 8 inches	
Drilling Fluid: N/A		Depth to Water Initial: N/A	Comp. N/A
Completion Information: Backfill with native		Logged by: MIJ	Checked by:

Depth (feet)	Description	Lithology	Headspace (ppm)	Samples: Number	Samples: Blow Count	Remarks
						Background Headspace .6 ppm
5	Dark Brown Sandy Silt		2	5		
10	Dark Brown Clayey Silt		95	10		
15	Greenish Grey and Light Brown Silt		45	15		
20	Greenish Grey and Light Brown Silt		9	20		
25	Greenish Grey and Light Brown Sandy Silt		8.5	25		
30	Mixed Grey, Brown, Opaque Fine-Medium Sand		2	30		Total Depth 30', Dry

TRC

Del Mar Analytical
18102 Sky Park South, Suite F • Irvine, CA 92714
(714) 261-1022 • FAX (714) 261-1228

TRC Environmental Consultants
23361 Madero St., Suite 100
Mission Viejo, CA 92691

Date Sampled: 10/31/89
Date Received: 11/01/89
Date Analyzed: 11/02/89
Date Reported: 11/02/89

Attention: Derek Faulk

Project: 6700-P23-04, Turner-Santa Fe Springs

Analysis: Total Recoverable Petroleum Hydrocarbons:
Soil Samples

Sample Description	Sample Number	Detection Limits ppm	Sample Results ppm
TSB3-20	9110001	5	N.D.

N.D. = None Detected above stated Detection Limit

This analysis was performed by extracting the sample with Freon 113 and using EPA method 418.1 for hydrocarbon detection (IR absorbtion).

Del Mar Analytical

Gary Steube
Laboratory Director

Del Mar Analytical
18102 Sky Park South, Suite F • Irvine, CA 92714
(714) 261-1022 • FAX (714) 261-1228

TRC Environmental Consultants
23361 Madero St., Suite 100
Mission Viejo, CA 92691

Date Sampled: 10/31/89
Date Received: 11/01/89
Date Analyzed: 11/01/89
Date Reported: 11/02/89

Attention: Derek Faulk

Project: 6700-P23-04, Turner-Santa Fe Springs

Analysis: Total Petroleum Hydrocarbons : Soil Samples

Sample Description	Sample Number	Detection Limits ppm	Sample Results ppm
TSB3-35	9110002	5	N.D.

N.D. = None Detected above stated Detection Limit

This analysis was performed using EPA methods 3550 with 8015 for hydrocarbon detection. Method 8015 was modified to meet the specifications of the California LUFT Manual.

Del Mar Analytical

Gary Steube
Laboratory Director

Del Mar Analytical
18102 Sky Park South, Suite F · Irvine, CA 92714
· (714) 261-1022 · FAX (714) 261-1228

TRC Environmental Consultants
23361 Madero St., Suite 100
Mission Viejo, CA 92691

Date Sampled: 11/06/89
Date Received: 11/07/89
Date Analyzed: 11/08/89
Date Reported: 11/08/89

Attention: Derek Faulk

Project: 6700-P23-03, Turner-Sante Fe Springs

Analysis: Total Petroleum Hydrocarbons: Soil Sample

Sample Description	Sample Number	Detection Limits ppm	Sample Results ppm
TMB-1-20	9110215	1.0	N.D.
TMB-3-10	9110216	1.0	2200
TMB-3-30	9110217	1.0	3.3

N.D. = None Detected above stated Detection Limit

This analysis was performed using EPA methods 5030 with 8015 for hydrocarbon detection. Method 8015 has been modified to meet the specifications of the California LUFT Manual.

Del Mar Analytical

Gary Steube
Laboratory Director

Del Mar Analytical
18102 Sky Park South, Suite F • Irvine, CA 92714
(714) 261-1022 • FAX (714) 261-1228

TRC Environmental Consultants
23361 Madero St., Suite 100
Mission Viejo, CA 92691

Date Sampled: 10/31/89
Date Received: 11/01/89
Date Analyzed: 11/01/89
Date Reported: 11/02/89

Attention: Derek Faulk

Project: 6700-P23-04, Turner-Santa Fe Springs

Analysis: Total Hydrocarbons with BTEX distinction:
Soil Sample

Sample Description	Sample Number	Benzene ppm	Toluene ppm	Ethylbenzene ppm	Xylenes ppm	Total Hydrocarbons ppm
TSB6-10	9110016	0.14	4.4	22	120	1800
TSB6-30	9110017	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limit		0.05	0.05	0.05	0.05	1.0

N.D. = None Detected above stated Detection Limit

This analysis was performed using EPA methods 5030 with 8015 for hydrocarbon detection, and 8020 for BTEX detection. Method 8015 has been modified to meet the specifications of the California LUFT Manual.

Del Mar Analytical

Gary Steube
Laboratory Director

Del Mar Analytical
18102 Sky Park South, Suite F • Irvine, CA 92714
(714) 261-1022 • FAX (714) 261-1228

TRC Environmental Consultants
23361 Madero St., Suite 100
Mission Viejo, CA 92691

Date Sampled: 11/01/89
Date Received: 11/02/89
Date Analyzed: 11/03/89
Date Reported: 11/03/89

Attention: Derek Faulk

Project: 6700-P23-03, Turner-Santa Fe Springs

Analysis: Total Hydrocarbons with BTEX distinction:
Soil Sample

Sample Description	Sample Number	Benzene ppm	Toluene ppm	Ethylbenzene ppm	Xylenes ppm	Total Hydrocarbons ppm
Excavation 11-7	9110071	N.D.	N.D.	0.08	0.10	N.D.
Detection Limit		0.05	0.05	0.05	0.05	1.0

N.D. = None Detected above stated Detection Limit

This analysis was performed using EPA methods 5030 with 8015 for hydrocarbon detection, and 8020 for BTEX detection. Method 8015 has been modified to meet the specifications of the California LUFT Manual.

Del Mar Analytical

Gary Steube
Laboratory Director

TRC Environmental Consultants, Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	PTO
6760-P23-04	Twin Santa Fe Springs		3551

SAMPLERS: (Signature)	(Printed)
Patricia D. Rogacky	Patricia D. Rogacky

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	8240	418.1	8015-High	REMARKS
TSB1-5	10/31			\	Panel 3	1				Hold
TSB1-10	"			\	"	1				"
TSB1-15	"			\	"	1				"
TSB1-20	"			\	"	1				"
TSB2-5	"			\	"	1				"
TSB2-10	"			\	"	1				"
TSB2-15	"			\	"	1				"
TSB2-20	"			\	"	1				"
TSB3-5	"			\	"	1				"
TSB3-10	"			\	"	1				"
TSB3-15	↓			\	↓	1				Hold
TSB3-20	11/31			\	Panel 3	1		X		24-hour

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Edward Kwan	10/31/85 2:30				
(Printed) Edward Kwan		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		Randall A. Schwall	11/1/85 8:20	
(Printed)		(Printed) Schwall		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

TRC Environmental Consultants, Inc.

CHAIN OF CUSTODY RECORD

No. 3552

PROJECT NO.: 6700-P23-04

PROJECT NAME: Texaco Santa Fe Springs

SAMPLERS: (Signature) Patricia D. Pagalty

(Printed) Patricia D. Pagalty

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	8240	413.1	8015 H. Mod.						REMARKS
TSB3-25	10/31			\	Parcel 3	1			~~X~~						~~24-hour~~ Hold
TSB3-30	↓			\	↓	1									Hold
TSB3-35	↓			\	↓	1		X							~~Hold~~ 24-hour
TSB3-40	↓			\	↓	1									Hold
TSB3-50	↓			\	↓	1									Hold
TSB3-60	↓			\	↓	1									Hold
TSB3-70	↓			\	↓	1									Hold
TSB3-80	↓			\	↓	1									Hold
TSB3-25	10/31			\	Parcel 3	1	X								24-hour

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Edward K[illegible]	11/1/[illegible] [illegible]				
(Printed) Edward K[illegible]		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		B[illegible] Schindler	11/1/89 8:20	
(Printed)		(Printed) Schindler		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

TRC Environmental Consultants, Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME		No.
C700-P23-04	Turner Santa Fe Springs	PARAMETERS	3669

SAMPLERS: *(Signature)* [signature] / Mary Janecek

(Printed) [illegible] / Mary Janecek

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	418.1	8015-DIESEL	8015/8020						REMARKS * PLEASE HOLD FOR ANALYSIS
TSB-5-80	10/31			X	CENTER AREA, PIPE END	1									80'
TSB-5-85	10/31			X	CENTER AREA PIPE END	1		—							85'
TSB-6-5	10/31			X	NORTH of OIL WELL	1									5'
TSB-6-10	10/31			X	NORTH of OIL WELL	1			X						10'
TSB-6-15	10/31			X	NORTH of OIL WELL	1									15'
TSB-6-20	10/31			X	NORTH of OIL WELL	1									20'
TSB-6-25	10/31			X	NORTH of OIL WELL	1									25'
TSB-6-30	10/31			X	NORTH of OIL WELL	1			X						30'

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
[signature]	11/1/89 10:25				
(Printed) Edward Kane		(Printed)	(Printed)		(Printed)

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
		[signature]	11/1/89 10/20	
(Printed)		(Printed) Schindler		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

TRC Environmental Consultants, Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	No. 3665
6700-P3-03	Turner - Santa Fe Springs		

SAMPLERS: (Signature) Jack W. Mahler (Printed) Jack W. Mahler

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	418.1	8080	8240	Gasoline TPH BTEX					REMARKS
TSB-5-90'	11/1	12:30			Turner Soil Boring 5 - 90'	1									HOLD
TSB 5-100'	11/1	12:45			" " " " 100'	1									HOLD
TSB-5-110'	11/1	1:08			" " " " 110'	1			X						24 Hr
Excavation 3-1.5-2'		—			Excavation 3- 1.5' -2.0'	1	X	X							24 Hr
" 3-4.5'	11/1	8:30			" 3-4.5'	1									HOLD
" 8-5'	11/1	11:00			" 8-5'	1									HOLD
" 9-6'	11/1	12:15			" 9-6'	1	X	X							24 Hr
" 9-9'	11/1	12:15			" 9-9'	1									HOLD
" 11-7'	11/1	2:50			" 11-7'	1			X						24 Hr

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Faul M	11/1 1:45				
(Printed) FAULK		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		Allie Allen	11/2 1:55	
(Printed)		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

TRC Environmental Consultants, Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME		No.
6700-P23-03	Texaco - Santa Fe Springs		3664

SAMPLERS: (Signature) [illegible]

(Printed) Mark [illegible]

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Gasoline	Diesel	Oil						REMARKS
TMB-1-5'	11-6-89	745		x	West of Waste OST	1									Hold
TMB-1-10'	"	800		x	"	1									Hold
TMB-1-15'	"	805		x	"	1									Hold
TMB-1-20'	"	815		x	"	1	X	X							24 Hr
TMB-1-25'	"	820		x	"	1									Hold
TMB-1-30'	"	830		x	"	1									Hold
TMB-2-5'	"	910		x	[illegible] of [illegible]	1									Hold
TMB-2-10'	"	915		x	"	1									Hold
TMB-2-15'	"	925		x	"	1			X						24 Hr
TMB-2-20'	"	930		x	"	1									Hold
TMB-2-25'	"	935		x	"	1			X						24 Hr
TMB-2-30'	"	950		x	"	1									Hold

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]					
(Printed) Jim S[illegible]		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		[signature]	11-7-89 10:50	
(Printed)		(Printed) Schneider		

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TRC Environmental Consultants, Inc.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	
6700 P2303	Tronox SFS		3656

SAMPLERS: (Signature) [signature] (Printed) [illegible]

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Diss. O/I	REMARKS
TMB-5-20'	11-6	210		X	Behind RR - SWTL	1	Y	24 Hr
TMB-6-5'	"	230		X	[illegible]	1		Hold
TMB-6-10'	"	235		X	"	1	X	24 Hr
TMB-6-15'	"	240		X	"	1	X	24 Hr
TMB-7-5'	"	250		X	[illegible]	1		Hold
TMB-7-10'	"	255		X	"	1	X	24 Hr
TMB-7-15'	"	305		X	"	1		Hold
TMB-8-5'	"	325		X	[illegible]	1		Hold
TMB-8-10'	"	335		X	"	1	X	24 Hr
TMB-8-15'	"	340		X	"	1		Hold
TMB-9-5'	"	355		X	[illegible]	1	X	24 Hr
TMB-9-10'	"	400		X	"	1		Hold

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
(Printed)		(Printed)	(Printed)		(Printed)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) [signature]	Date / Time 11-7-98 1050	Remarks	
(Printed)		(Printed) Schneller			

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

APPENDIX C

Permits for Tank Removals

TRC

CITY OF SANTA FE SPRINGS
FIRE DEPARTMENT
FIRE ENVIRONMENTAL PROTECTION BUREAU
11300 GREENSTONE AVE., SANTA FE SPRINGS, CA 90670
(213) 944-9713

PLAN REVIEW/FIELD INSPECTION/SPECIAL ACTIVITIES APPLICATION

ame of Facility S/E Cor of Bloomfield/Lakelan 11102 Bloomfield
Project Address 11102 Bloomfield
Architect/Engineer _____ telephone _____
ddress 714-355-5624
Contractor Mayfield Ent Inc/DD Building telephone 434-2115
ddress 14879 Whittram Ave Fontana, Ca. 92335

CENSED CONTRACTOR DECLARATION:
I hereby affirm that I am licensed under provisions of Charter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

cense Class C61 D40 License No. 425319
Signature Jason C Mayfield Date 1/31/90

OWNER BUILDER DECLARATION
I hereby certify that I have read this application and state that the above information is correct. I agree to comply with all city and county ordinances and state laws relating construction, and hereby authorize representatives of this city to enter upon the above mentioned property for inspection purposes.

Signature _____ Date _____ City License _____

TYPE OF CONSTRUCTION CIRCLE ONE			
NEW	ADD	ALTERATION	REPAIR
CONVERSION	DEMOLISH	OTHER	
DESCRIPTION OF WORK			

(√)	DESCRIPTION	FEE
	PLAN REVIEW AND FIELD INSPECTIONS	
	Preliminary Plan Review	
	Fire Alarm Systems	
	Fire Extinguishing System	
	FIRE SPRINKLER SYSTEMS	
	a. Up to 20,000 sq. ft. per floor	
	b. 20,001 to 50,000 sq. ft. per floor	
	c. 50,001 to 100,000 sq. ft. per floor	
	d. More than 100,000 sq. ft. per floor	
	Flammable/Combustible Liquid Room	
	Compressed Gas System	
	Flammable/Combustible Liquid Tank (U/G & A/G)	
	L.P.G. Tanks	
	Paint Spray Booths	
	Dip Tank	
	Dust Collection System	
	Standpipes (Wet/Dry)	
	NEW CONSTRUCTION PLAN REVIEW	
	a. Up to 20,000 sq. ft. per floor	
	b. 20,001 to 50,000 sq. ft. per floor	
	c. 50,001 to 100,000 sq. ft. per floor	
	d. More than 100,000 sq. ft. per floor	
	Other	

(√)	DESCRIPTION	FEE
	On-site Fire Hydrant System	
	Drying Ovens	
	High-Piled Combustible Stock (Racks/Draft Curtains/Hose Racks/Smoke Vents)	
	Tents and Air Support Structure	
	Mechanical Refrigeration System	
	Flow Coating Equipment	
	Tenant Improvements (Structural)	
	Tenant Improvements (Auto. Sprinklers)	
	Soil Venting Systems	
	Gas Detection System	
	Sprinkler System (20 heads or less)	
	SPECIAL ACTIVITIES AND EVENTS -- ONE TIME PERMITS	
	Hydrant Flow Request	
	U/G TANK REMOVAL	
√	a. First Tank	200
√	b. Each Additional Tank X 3	300
	Abandonment/Reabandonment of Oil Wells (Including Capping)	
	Monitoring Wells	
	Standby Fire Watch	
	Fire Department Equipment With Crew	
	Request Inspection	
	Risk Management Prevention Program (RMPP) 4 hour minimum	
	Other	

MAKE CHECKS PAYABLE TO THE CITY OF SANTA FE SPRINGS

TOTAL DUE 500

Nikitin 1-3-90
INSPECTOR DATE

LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS
CLOSURE REPORT REQUIREMENTS

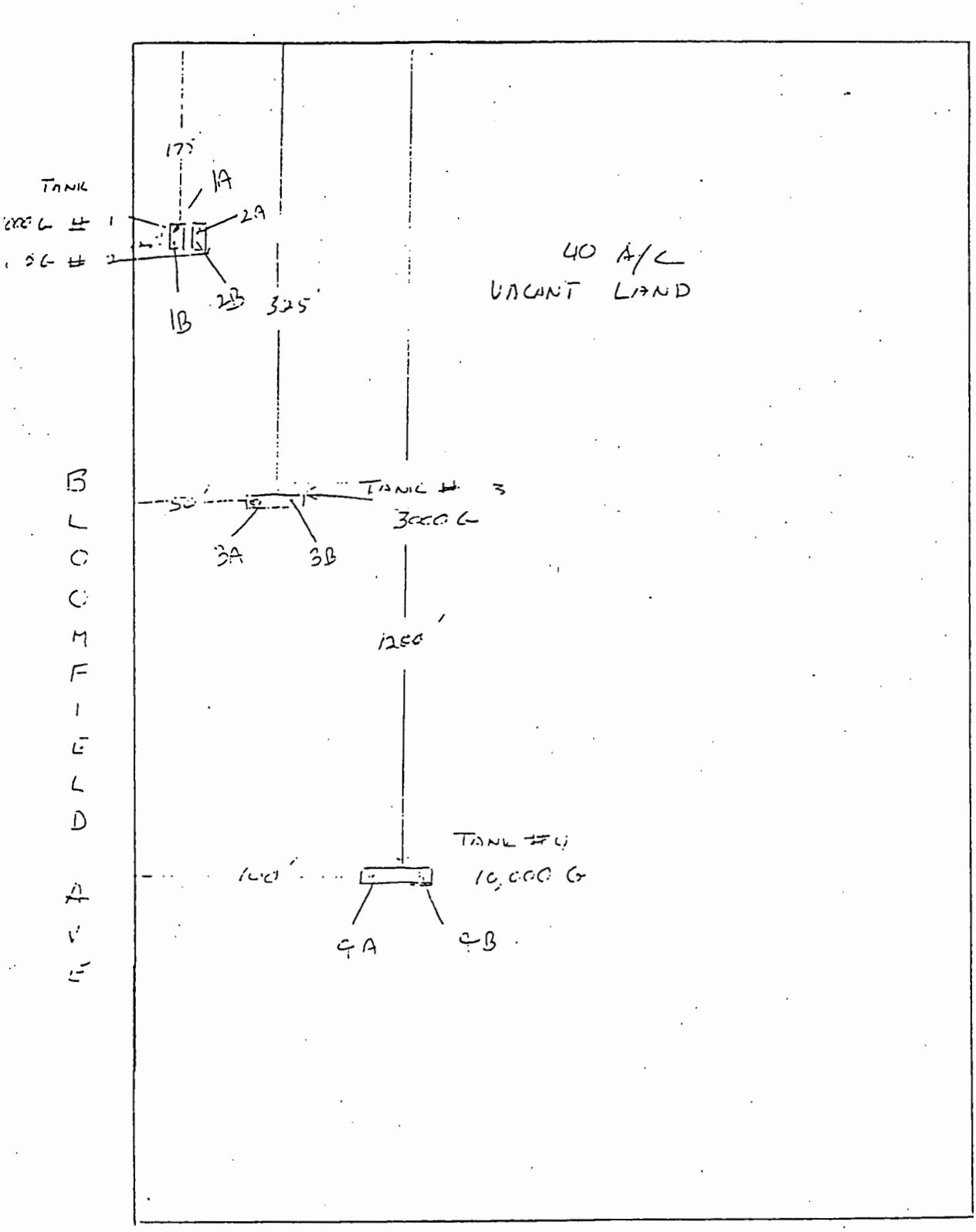
A closure report shall be submitted to the Los Angeles County Department of Public Works, Waste Management Division, P.O. Box 1460, Alhambra, CA 91802 containing:

1. File number of facility and closure permit number.
2. Plot plan to scale showing locations of tanks, sampling points, buildings, adjacent streets and north arrow.
3. Description of methods for obtaining, handling and transporting samples.
4. Time and date samples were obtained.
5. If borings were established, boring logs certified by a CA Registered Geologist, CA Certified Engineering Geologist or CA Registered Civil Engineer with sufficient experience in soils.
6. Chain-of-custody documentation initiated by person obtaining sample through person at State Department of Health Services certified laboratory.
7. Disposal destination of tanks and evidence of legal disposal.
8. Analysis results by a State certified laboratory submitted on laboratory letterhead showing analysis date, methods of extraction and methods of analysis.
9. Documentation as to depth of groundwater at facility.
10. Manifests to documentation hazardous waste disposal of any removed soil and rinseate.
11. Any observations of site contamination.
12. Remedial action plan to mitigate contamination.
13. Report to be signed by CA Registered Geologist, CA Certified Engineering Geologist or CA Registered Civil Engineer with sufficient experience in soils.

Signature _____ Date 1-25-88

cg2/CLOSURE

Site Assessment regarding our letter dated October 8, 1986 should be addressed to before this site can be considered closed



OWNER GEORGE & MARYBETH LUNKEIT
P.O. BOX 414
NORWALK, CA

SITE
11102 BLOOMFIELD
SANTE FE SPRINGS CA

CONTRACTOR
J. D. BRUNING & SON INC
14539 WHITTRAM AVE
FONTANA, CA
714 - 355-5229